

range finding means for finding distance, said range finding means being carried within said housing and oriented so that said range finding means directs a beam of light through said window;

means for moving said range finding means parallel to said window;

means carried by said housing for gripping said housing;

tire-engaging means carried by said housing for engaging a side and two locations on a rolling face of a tire to provide a three-point contact for preserving the integrity of a line of reference to the tire defined by the movement of said range finding means; and

means carried by said housing and in operational connection with said range finding means and said moving means for sending distance data from said range finding means as said range finding means is moved parallel to said window while a plane of said window is parallel to a tangent of the tire rolling face where engaged by said tire-engaging means.

2. (Previously Presented) The probe as recited in claim 1, wherein said housing has an a concave arcuate shape with opposing edges for engaging the rolling face at two locations to support the housing on a tire.

3. (Original) The probe as recited in claim 1, further comprising a communications port means carried by said gripping means for communicating distance data to a computer.

4. (Original) The probe as recited in claim 3, wherein said communications port means transmits distance data using an infrared transmission.

5. (Original) The probe as recited in claim 3, wherein said communications port means transmits measurement data using a radio frequency transmission.

6. (Original) The probe as recited in claim 1, wherein said gripping means is a handle carried by said proximal end of said housing.

7. (Previously Presented) The probe as recited in claim 3, further comprising a handheld computer, said handheld computer being in electrical communication with said range finding means, and said handheld computer having a display and means for plotting distance data.

8. – 24. (Canceled)

25. (Previously Presented) A probe for measuring tread depth, said probe comprising:  
a housing having a window formed therein, said housing having a proximal end and a distal end;

range finding means for finding distance, said range finding means being carried within said housing and oriented so that said range finding means directs a beam of light through said window;

means carried by said housing for gripping said housing;

tire-engaging means carried by said housing for engaging a side and two locations on a rolling face of a tire to provide a three-point contact for preserving the integrity of a line of reference to the tire defined by the movement of said range finding means;

means for moving said range finding means parallel to the line of reference; and

means carried by said housing and in operational connection with said range finding means and said moving means for sending distance data from said range finding means as said range finding means is moved parallel to the line of reference while a plane of said window is parallel to a tangent of the tire rolling face where engaged by said tire-engaging means.

26. (Previously Presented) The probe as recited in claim 25, wherein said range finding means measures distance to said tire face by triangulation.

27. (Previously Presented) The probe as recited in claim 25, wherein said range finding means further comprises two sensors and a light source for directing said beam of light, said sensors located on either side of said light source.